



**LOWELL PUBLIC SCHOOLS**  
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To: Jim Hall  
From: Rick Underwood  
Re: Facilities Improvements  
Date: 6/16/23

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**[By Jackie Doherty]: Request the Superintendent provide the Committee with a report in June that outlines facility improvements, costs, and timelines targeted to those schools most in need of repairs to support fair and adequate learning environments across the district. Priority schools include, but are not limited to, the Career Academy and the Bartlett Community Partnership School. For the Career Academy, the immediate concerns are to install the grant-funded \$25k in culinary equipment that has been in storage for six years, to upgrade bathrooms, and to provide for an outdoor physical activity space such as basketball. The Bartlett Community Partnership School also requires significant bathroom upgrades, replacement of lockers and missing ceiling/floor tiles throughout the school, as well as an immediate need for a temporary wheelchair ramp while waiting for a permanent one.**

The Lowell School Department recently submitted an RFP to develop a five-to-ten-year comprehensive facilities assessment and master plan. A plan that analyzes, investigates, provides alternative options and solutions to all challenges/constraints that school department facilities are currently facing. The RFP was submitted in the Fall of 2022; however, there were no bidders at the time. This RFP is scheduled to be submitted once again in July 2023. With that being said the facilities department has been tasked with developing a list, describing top priorities for facilities in the district that should be addressed within the given window of five-to-ten-years.

1. A top priority for any district is safety for staff/students. Security cameras were installed in every building within the district a few years ago. Elementary schools currently have cameras installed on the exterior of the buildings in select locations. They may not cover the entire perimeter of the building, thus leaving out some exterior windows/doors. In addition, with no cameras installed in the interior of the building, any incidents that occur within the building will not be recorded or available to be played back on video. Middle and alternative schools currently have cameras located in select locations on the interior and exterior of the buildings. However, despite this there are still locations that may not be covered by camera as was the case with elementary schools. Another issue with the current camera system is that many cameras have

low resolution which makes it difficult to distinguish facial features/other details that may be helpful when incidents occur. The addition of higher resolution cameras to each building, in addition to installing open door monitors on each exterior door, will increase the security of each building and help achieve a safer learning environment.

The cost associated with the school improvements listed above can be broken down into two parts. The initial cost will be for the installation of said items which have an estimated cost of approximately \$300,000 to \$500,000. Once installation is complete, a yearly cost will be required to access the necessary software associated with these items. This cost is to be determined/negotiated with the given company.

2. Viable learning space is a priority for any school district. Some schools are on the verge of overcapacity due to changes in curriculum and incorporation of additional programs. These changes have increased the need for designated spaces for students who may need a more direct, one-on-one, style of learning. However, two schools, STEM Academy at the Rogers School and the Adie Day School, already fit this description. The STEM Academy currently utilizes spaces that are not necessarily an optimal setting for learning or originally designed to be used as a classroom. Rooms that are not conducive to learning create more distractions and pose challenges for proper learning to be conducted. More space for classrooms and proper settings for students with different learning abilities is needed to achieve maximum efficiency within each learning space and adjust for the changes in curriculum over the years. A plan is already in place to affix portable structures adjacent to the STEM Academy, that include more classroom space and bathrooms to account for the changing needs of staff/students. Ensuring that this plan proceeds forward, and deadlines are met will result in timely construction of these structures and increase the learning experience for this school. **Regarding the STEM Academy modular project, there was a meeting today with the consultants and the OPM. There is another meeting next Friday where the figures attached will be further solidified. The School Committee will likely be able to vote on an option to go out to bid by July 19, 2023 dependent upon the Solicitor's Office's review of legal requirements for the proposed sites. Presently, it appears that an additional \$600,000-\$700,000 would be needed to produce 8 classrooms, whereas 6 classrooms could be procured and installed within the budget. In sum, a 8-classroom project will cost about \$800,000 more than the 6-classroom option. These projections will be solidified next Friday.**

The Dr. Janice Adie Day School has a student capacity of 66. The current measure for this school is 60 students. That leaves little swing space as an additional enrollment of 7 students will result in this school being overcapacity. This will force new enrollments to be transferred/outsourced to other school districts. For every student that is transferred/outsourced to other school districts, the Lowell School Department likely will forgo approximately \$100,000.00. With the continued growth in enrollment for this school, relocating this program to another facility will ensure proper accommodation for all students. The Laura Lee Alternative School and B.R.I.D.G.E. (Riverside) Programs face a different set of challenges than the STEM Academy and Dr. Janice Adie Day School, in regard to space. These particular schools are housed in buildings that are very old and in a state of disrepair. These facilities do not meet the



standards of what a proper school setting should be and are in need of major repairs/modifications to modernize these buildings. Developing a plan to redesign/restructure the district by way of repairing, renovating, expanding and/or relocation of certain schools will help achieve a desired learning environment.

**The cost of acquiring another facility that will sufficiently meet the needs of one of our schools is unknown, but will be a major cost. This is due to market fluctuations and a limited supply of buildings that will fit the needs of a school setting with the City of Lowell. The School Department has drafted a RFP for additional space which is being prepared for publication. This RFP will provide options to the Lowell School Committee and the City.**

3. Proper shades and blinds also lead to a safer learning environment. With that being said, continuing to move forward with a prior project that entails replacing shades/blinds in the district is a priority. There are many rooms/areas in the district that lack proper functioning shades/blinds. This leaves these areas exposed to outside onlookers creating a fishbowl effect, thus posing concerns during lockdown circumstances. Replacing nonfunctional shades/blinds and installing new shades/blinds in areas that do not have these fixtures will increase the security of each building and help achieve a safer learning environment.

**The approximate cost for replacement of necessary shades and blinds in the district is \$350,000. This includes the cost of materials and installation of these fixtures for each location.**

4. Ensuring that learning spaces are within the optimal temperature range is also a priority. Many buildings lack reliable distribution of heating. This is mostly due to issues with mechanical controls of valves, dampers, etc. Heating controls that do not function correctly can cause temperature disparity and create a situation where one section of a building may be twenty to thirty degrees warmer/cooler than another section of the same building. These situations may lead to leaks or other distractions that can disrupt learning and force classrooms to have to relocate elsewhere within the building, or in extreme cases, lead to cancellation of school and create an even greater negative impact on learning. Upgrading these controls within HVAC systems and installing uniform controls across the district will limit distractions and help achieve a better learning environment for students.

**On average HVAC basic maintenance for school building ranges from \$2,000.00 - \$15,000.00 depending on the depth of contracted services. Basic control software upgrades and minimal repair to inner workings \$350,000.00.**

5. With the increase in summer school programs throughout the district, in combination with increased average summer length/temperatures, a functioning air conditioning system is a priority for facilities originally designed with this type of system. There are multiple buildings that have a non-working air conditioning system. Many of these buildings are used regularly each summer for various programs. Rooms without proper ventilation can result in increased temperatures, impacting concentration and attention, and taking time away from learning. Repairing/replacing/installing air conditioning units in these spaces will limit distractions and create a better learning experience for our students.

**Chillers and associated mechanical equipment need replacement. 85% of original systems are obsolete and parts are no longer being manufactured- \$260,000.00 - \$380,000.00 depending on system size and cooling capacity (Note: Some building have lead lag set up so would be double cost).**

6. Ensuring that maintenance issues with the facilities in the district are handled in a timely manner is another priority. The current configuration of the maintenance efforts is all plumbing, electrical, HVAC repairs are handled by the department of public works. A collaboration between the school department and City of Lowell to increase the workforce of laborers to handle repairs among all city buildings will increase the timeliness of repairs. Thus, it will limit distractions within a building and enhance the learning experience of our students.

**On average, HVAC basic maintenance for school building ranges from \$2,000.00 - \$15,000.00 depending on the depth of contracted services (Run through of sequence of Operations-Coil Inspection-Inspect Wiring-Check Belts-Check Coils-Grease/oil bearings motors if Applicable-Check Amp draw electrical for mechanical Components-Coils cleaned-filters changed).**

7. Proper ventilation is another priority for the school district. Many of the smaller schools are housed in older buildings that possess hopper style windows that are not original to the building. Some of the schools that fall into this category are the Career Academy (Molloy), Cardinal O'Connell, and Adult Education. These particular buildings lack any form of mechanical ventilation, thus ventilation during warmer summer months is heavily relied on natural airflow via open windows. The hopper style windows do not allow for as much airflow as the windows that were original to each building. In addition, these buildings have many windows that are in need of repair as they do not function correctly. Rooms without proper ventilation can result in increased temperatures and poor air quality, thus creating a major distraction, taking time away from learning. Replacing these windows with modern/energy efficient will improve ventilation within these buildings, limit distractions, and create a better learning environment.

**The cost of window replacements at the three buildings listed can be estimated to roughly cost \$1.2 million. This is due to the cost of materials, labor, the need for a designer, as well as the unique setting of these buildings with regard to historical value and the need for improvements to match original designs.**

8. Another priority for school facilities in the district is having fully functional common areas such as auditoriums, cafeteriums and gymnasiums. Schools use these areas on a daily basis for school-related shows, gatherings, meetings and other events. Many of these spaces possess equipment that is original to the building and is in need of upgrading/replacement. Schools that have auditoriums are the Butler, Sullivan, Stoklosa and Wang. These auditoriums currently have poor lighting due to nonfunctional fixtures, broken stadium style seats, torn/worn out carpet. There are also schools that have had minimal upgrades to their gymnasiums over the years. Some



schools have wood floors, such as the Bartlett, which has worn through the finishing sealant over the years, a product that protects the wood floors. Restoring these areas to their original conditions will ensure a safe and appealing space for our staff/students to utilize.

**The cost associated with these improvements to gymnasiums, cafeteriums and auditoriums can be estimated at \$500,000. This includes new flooring in these areas and repairs to seats and fixtures.**

9. Another priority for the district is ensuring each classroom has proper furnishings and tools for our staff/students to maximize the learning capabilities of each space. Many schools are currently equipped with science labs, computer labs, libraries, and other shop like settings. These spaces may no longer be fully utilized due to changes in curriculum and may create a setting that is not ideal for learning to ensue. Furniture in classrooms may be outdated as well and in need of upgrading/replacing. Evaluating each classroom space and providing proper furnishings within each classroom to meet the needs of curriculum will ensure each space is feasible and conducive to learning.

**The cost for new furnishings will cost roughly \$75,000 per average sized building.**

10. Not included in this list of facilities priorities is ongoing MSBA projects that include repair/replacement of roofs, windows (for applicable schools) and boilers. Schools that are currently set to receive roof repairs are the Shaughnessy, Wang, Robinson, McAuliffe, Bailey and Sullivan. Schools currently set to receive boiler upgrades are Robinson, McAvinnue, Bartlett, Butler, Wang, Greenhalge, Daley, Rogers STEM, McAuliffe, Bailey and Sullivan schools. In addition to this, the Robinson School will also be receiving new doors/hardware and windows.

In addition, the Bartlett School is set to receive new lockers throughout the school at a cost of \$132,075 and a new wheelchair ramp at a cost of \$75,000. The school is also missing some floor and/or ceiling tiles in various locations which will be addressed by the city over the summer months. Bathroom upgrades are in the works as well at a price to be determined. All of these projects for this school are set to be conducted within one year's time.

The Career Academy (Molloy) is set to allocate space for a culinary program. All the equipment has been purchased and an adequate floor plan has been designed. The price to complete installation of necessary utilities is to be determined as quotes for running electric and gas lines have not yet been received. The bathrooms are set to be upgraded at a cost of \$400,000. The addition of basketball hoops outside the building for adequate outdoor play space is also in the works. Three basketball hoops will be installed in outdoor locations, two of which are at the Career Academy and one for the Riverside (B.R.I.D.G.E.). The cost for the installation and supply of these hoops for these two locations is \$12,511. The projects for this school are set to be conducted within one year's time.

Any question or concerns with this report please feel free to call me 978-454-2010  
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